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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

October 14, 2010

John Burggraf  
Lakeview Rock Products, Inc.  
P.O. Box 540700  
North Salt Lake, Utah 84054-0700

Subject: Tenth Review of Notice of Intention to Commence Large Mining Operations, Lakeview Rock Products, Inc., Beck Street Quarry, M/035/0020, Salt Lake County, Utah

Dear Mr. Burggraf:

The Division has completed the review of your April 16, 2010, response to the Division's comments dated February 16, 2010. Your response letter recommends that the July 30, 2008, and April 16, 2010, letters be incorporated in the Notice of Intention to Commence Large Mining Operations (NOI) as addenda. The Division disagrees with this approach and asks that the responses be included in the text of the NOI. Otherwise, it becomes very difficult to understand what is and what is not approved. Any part of the plan would have to be checked against these addenda to be sure it is still valid, and this is very cumbersome and confusing. We acknowledge your statement that the NOI is a form of contract, but the NOI can be changed through the amendment process.

The Division asks for a redline/strikeout review copy of changes to the text, but when the changes are approved, we ask for a clean copy with redline/strikeout removed. This is simply to aid in the review. Without redline/strikeout, the reviewer has to do a word-by-word comparison of the original and modified texts. You may want to submit a complete copy of the entire text with changes highlighted. A cover-to-cover review will be done on the final copy of the plan.

Three rule variances were requested in your notice of February 2006. As required by R647-4-112.3, the Division must specifically approve or disapprove these variances in writing.

- Variance 1 Highwall. The Division denies this request for the area within the Salt Lake City Corporate boundary. Potential approval of this variance request for areas within North Salt Lake City will depend on the outcome of review of the slope stability analysis. The Division's letter of May 12, 2008, granted "... a time-limited highwall variance ... until June 2009," but there was no final approval. Correspondence from Salt Lake City Corporation dated May 10, 2006, references mandatory requirements within a Development Agreement dated December 20, 1996. This Development Agreement, executed between Salt Lake City Corporation and Hughes and Hughes Investment Corporation, requires that the final overall slope angle in excavated areas not exceed 45 degrees as measured from a horizontal plane. The variance request conflicts with this requirement.
- Variance 2 Revegetation. This variance is unneeded and should be removed from the plan.





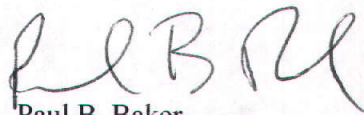
- Variance 3 Soil. The Division is willing to approve this variance request if the changes discussed in this review are included in the plan.

The attached comments will need to be addressed before the changes in the plan can be approved. Included in these comments are references to a March 5, 2010, settlement agreement between North Salt Lake City and Lakeview Rock Products. The terms of this agreement necessitate some changes in the maps.

As discussed above, please reply to the deficiencies by submitting replacement pages to the plan, and the text should be in redline/strikeout format so we can readily discern the changes.

The Division would welcome a meeting to discuss this review. If you would like to schedule a meeting or if you have questions about the review, please contact me (PBB) at 801-538-5261, Leslie Heppler (lah) at 801-538-5257, or Tom Munson (TM) at 801-538-5321. I apologize for the time it has taken the Division to respond to your submittal but ask that you respond to this review by January 3, 2011. Please let me know if additional time is needed. Thank you for your cooperation in completing this permitting action.

Sincerely,



Paul B. Baker  
Minerals Program Manager

PBB:lah:eb

Attachment: Review

Cc: [Wayne.Mills@slcgov.com](mailto:Wayne.Mills@slcgov.com) [Lynn.Pace@slcgov.com](mailto:Lynn.Pace@slcgov.com) NSL City Mayor – Len Aarve

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**10th REVIEW OF NOTICE OF INTENTION  
 TO COMMENCE LARGE MINING OPERATIONS**

**Lakeview Rock Products Inc.  
 Beck Street Quarry**

**M/035/0020  
 October 14, 2010**

**General Comments:**

Com ment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1	General	The Operator responded to DOGM in correspondence, hence most review comments are listed under General Comments and not under each rule.	lah	
2	Comment #1 response	Incorporate all comments from all correspondence as replacement pages in the NOI. Correspondence is not part of the NOI, but it <i>is</i> public recorded.	lah	
3	General	Please update the Table of Contents to indicate changes that have been submitted, such as Figures 7 and 8 and a geologic map.	lah	
4	Comment #2 response	The NOI contains no pages 8, 9, or 10. For clarity, the plan needs to contain these pages even if the pages are marked that they were intentionally left blank.	lah	
5	Comment #3 response	Changes in the text of the NOI will need to reflect the findings of the stability report.	lah	
6	Comment #6 response	Thank you for the submittal of Figures 1-5, but these figures and others now need to be modified based on the March 5, 2010, settlement agreement between Lakeview Rock Products and North Salt Lake City. Figures 7 and 8 need to be modified as necessary based on this settlement agreement. There are additional comments listed below for each map.	lah	
7	Comment #9 response	Please include response in the text of the NOI and include a rockfall analysis in the slope stability report stamped by the geotechnical engineer of record.	lah	
8	Comment #10 response	As discussed in the cover letter with this review, the letter is not part of the NOI. Please include reference in the text of the NOI to the three figures submitted on July 30, 2008.	lah	
9	Comment #11 response	Include a north arrow on the general geologic map. A geologic map should be included at a scale that provides detail of the scope and scale of the Lakeview mine. The box on the map indicating the Lakeview Beck Street Quarry is larger than the permit boundary; please modify to match the permitted area.	lah	



Com ment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
10	Comment #12 response	The letter is not part of the NOI, please include the verbiage in the text of the NOI.	lah	
11	Comment #13 response	The NOI says no topsoils will be salvaged or stockpiled from the areas proposed for mining, but the April 16, 2010, letter says Lakeview Rock Products will harvest topsoil from undisturbed areas where it is safe and feasible. Please modify the text of the plan to include the commitment in the letter.	PBB	
12	Comment #15 response	Flyrock that affects public safety requires a change in the operational procedures of the mine. Please discuss blasting protocols and monitoring procedures. Rule R647-4-109 requires an assessment of surface and subsurface impacts, including, <i>at a minimum</i> , the items listed. Rule R647-4-107.1 lists methods to be used to ensure public safety, but this rule contains the caveat statement that the procedures are not to be limited to those listed.	lah	
13	Comment #17 response	Please include the SWPPP in an appendix in the plan. It contains information about water treatment that is appropriate for inclusion in the plan.	TM	
14	Comment #18 response	Please include the Air Quality Approval order in an appendix in the NOI.	lah	
15	Comment #23 response	Please make the changes in the NOI as discussed in the letter.	lah	
16	Comment #25 response	Bond will be release after the developer finishes the landscape or hardscape. (Comment only; no response needed.)	lah	
17	Page 1, para 3 & Plate A-2	Quaternary sediments are not to be overlooked, just because the site visit did not include that area. The slope stability report needs to address all areas of the permit that are either excavated or filled. The Quaternary sediments slope angle is to reflect the Geotechnical properties of the unit that will provide the operator an adequate factor of safety.	lah	

**R647-4-104 - Filing Requirements and Review Procedures**

Com ment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
18				



Tenth Review  
Page 5 of 8  
M/035/0010  
October 14, 2010

Com ment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
19	Page 2 of Approved Plan	According to the revised Figure 5, land ownership has changed since the plan was approved in 2008. The revised Figure 5 shows an area owned by North Salt Lake Heights Development that would be mined, and the owners of adjacent lands have changed. Please update the text.	PBB	



**R647-4-105 - Maps, Drawings & Photographs**

**General Map Comments**

Com ment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
20	All Maps	Include the North Salt Lake March 5, 2010, settlement agreement boundaries on each appropriate map.	lah	
21	All Maps	Show access roads to both the upper and lower mine on Figures 1 thru 5.	lah	
22		Please provide supporting watershed and drainage maps corresponding to the referenced watershed calculations.	tm	

**105.1 - Topographic base map, boundaries, pre-act disturbance**

Com ment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
23	Figure 1	The scale is incorrect.	lah	
24	Figure 2	The scale is incorrect.	lah	
25	Page 2	The Division requests telephone numbers of adjacent landowners.	lah	

**105.2 - Surface facilities map**

Com ment #	Sheet/ Page/Map/ Table #	Comments	Initials	Review Action
26	Figure 3	The scale is incorrect.	lah	

**105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)**

Com ment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
27	Figure 4	As noted on the cross sections, the highwall variance has been requested but has yet to be approved by the Division. (No response required.)	lah	
28	Figure 4	Add horizontal distance on cross sections, not just on scale bar below.	lah	
29	Figure 4	The Division recommends cross sections with no vertical exaggeration. Vertical exaggeration often confuses non engineers and the public when they view the cross sections.	lah	
30	Figure 5	Show the bonded area on the map and list disturbed acres in the legend under the appropriate section. As this map appears to be a reclamation treatments map, please show that the highwall benches will be reseeded as is shown on the approved version of Figure 5.	lah	



**R647-4-109 - Impact Assessment**

**109.1 - Impacts to surface & groundwater systems**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
31		Lime Canyon Springs is used for dust suppression, etc., as referenced on page 17 of the plan. Please state how the water gets to the property and is distributed. Please describe the potential impact the three springs will have on surface water or groundwater, flowing over or out of the pit slopes and/or highwalls.	TM	
32		Provide the watershed calculations and the necessary documentation to support the statements within the impacts section that no attempts are needed to route water through, around, or within the property. If water ponds exist in the eastern portion of the property, show that area on the appropriate operational map and how the water arrives in that area in a controlled manner. Additional hydrologic features exist on site: roads, piles, local topographic variability, and slopes to name a few. Finally, a description of the actions that occur to mitigate the impacts associated with these features must be included in the plan. This information may be in the SWPPP, but it is not included in the permit. Describe how the pit configuration does not increase erosion risks because of steep slopes in consolidated and unconsolidated materials. Again, once the hydrologic concerns related to mining operations are identified, then mitigation measures, plans, and controls are to be developed via narrative, drawings and maps. The stability of the highwalls due to erosion are and continue to be a concern, due to erosion risks of steep slopes in consolidated and unconsolidated materials. Provide the necessary documentation to show this is not a significant problem with highwall stability.	TM	

**109.4 - Slope stability, erosion control, air quality, safety**

Com ment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
33	NOI page 21	Slope stability is the responsibility of the operator. Until a completed slope stability report is received, change the verbiage in the text to indicate slope stability will be reevaluated as warranted or justified due to un foreseen changes in geologic or geomechanical conditions. Please commit that additional geotechnical evaluations will be done if groundwater is encountered as new working faces are excavated or as warranted.	lah	
34		The Division has requested a dynamic slope stability factor of safety numerous times; please commit in the NOI and add this to the slope stability report.	lah	



**R647-4-112 - Variance**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
35	Page 29	For reasons discussed in the cover letter of this review, the Division cannot approve the highwall variance request for areas within Salt Lake City Corporate limits, and approval of the request for other areas is dependent on results of the review of the slope stability study. Please modify the plan accordingly.	PBB	
36	Page 29	<p>The NOI requests a variance from topsoil stockpiling and redistribution requirements. Please modify this request. The April 16, 2010, letter contains a commitment to harvest topsoil from undisturbed areas where it is safe and feasible. This commitment, if included in the plan, fulfills regulatory requirements, so no variance from topsoil salvaging requirements is needed.</p> <p>The plan says soil will not be spread on the pit floor because of insufficient access to transport the soils; however, the plan also says amendments will be added, based on laboratory testing results, to provide an acceptable growth medium. This is considered an alternate method as required in R647-4-112.1.13. In the variance request, please reference this commitment as an alternate to spreading soil. Considering the circumstances, i.e. the lack of available soil, the difficulty with salvaging soil and transporting it to the pit floor, and the alternate method in the plan, the Division is willing to approve this variance request.</p>	PBB  PBB	
37	Page 29	As stated in the previous review, the request for a variance from revegetation requirements is not needed and should be removed from the plan.	PBB	

**R647-4-113 – Surety**

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
38	General	The Division's bond calculation sheets will be used to calculate the reclamation surety when the surety is due for escalation on November 1, 2011. (No response required.)	lah	